

TEKTRONIX, INC.
New European Patent Application

Agent File No.: 25380

**Method for Setting Up a Procedure of a Communication
Taking Place Between at Least Two Instances
and a Protocol Tester Realising Said Method**

CLAIMS:

1. Method for setting up a procedure of a communication taking place between at least two instances, with one instance being a protocol tester, characterised by the following steps which may be executed on said protocol tester:

- a) select the instances which take part in the communication;
- b) select a protocol layer on the basis of which the communication between the instances selected is to take place;
- c) select those abstract communication interfaces of the protocol layer, which take part in the communication;
- d) select the communication data;
- e) automatically set up through the protocol tester a communication procedure that may be executed between at least two instances on the basis of the selections made in steps a) to d),

with the selection of step c) and/or step d) being made graphically, and with the parameters selectable during said steps being assigned description files which are used in step e) to set up a communication procedure that may be executed between the instances.

2. Method according to claim 1,

characterised in that

moreover, in step a) the instances taking part in the communication are selected graphically and / or in step b) the protocol layer is selected

graphically, and that the parameters, which are selectable thereby process, are assigned description files which are used in step e) for setting up a communication procedure which may be executed between the instances.

3. Method according to claims 1 or 2,
characterised in that
the abstract communication interfaces comprise SAPs (Service Access Points).
4. Method according to any one of the above claims,
characterised in that
the communication data comprise PDUs (Protocol Data Units) and/or ASPs (Abstract Service Primitives).
5. Method according to any one of the above claims,
characterised in that
step d) comprises the following partial steps:
 - d1) graphically select a data format;
 - d2) graphically set up a communication sequence between the instances involved;
6. Method according to claim 5,
characterised in that
source code may be entered in step d2).
7. Method according to one of the above claims,
characterised in that
all parameters that may be selected are assigned description files, which are used in step e) for setting up a communication procedure that may be executed between the instances.
8. Protocol tester with

- a) means to select the instances (19, 20, 24, 26) taking part in a communication, with one of said instances being the protocol tester;
- b) means to select a protocol layer (20, 29a), on the basis of which the communication between the two instances is to take place;
- c) means to select those of the abstract communication interfaces (20, 32a) of the protocol layer, which take part in the communication;
- d) means to select the communication data (20, 34);
- e) means to automatically set up a communication procedure that may be executed between the instances through the protocol tester, on the basis of the selections according to a) to d)

with the selection means according to c) and/or according to d) being graphical selection means, and with the parameters selected by said selection means being assigned description files which, according to e), may be used by the setting-up means for setting up a communication procedure that may be executed between the instances.

9. Protocol tester according to claim 8,

characterised in that

the means to select the instances (19, 20, 24, 26) taking part in the communication and/or the means to select the protocol layer (20, 29a), are graphical selection means and that the parameters selected by said selection means are assigned description files which, according to e), may be used by the setting-up means for setting up a communication procedure that may be executed between the instances.

10. Protocol tester according to claim 8 or 9,

characterised in that

the abstract communication interfaces comprise SAPs (Service Access Points).

11. Protocol tester according to one of claims 8 to 10,
characterised in that
the communication data comprise PDUs (Protocol Data Units) and/or ASPs (Abstract Service Primitives).
12. Protocol tester according to one of claims 8 to 11,
characterised in that
it comprises means to enter source codes (44, 46).
13. Protocol tester according to one of claims 8 to 12,
characterised in that
all parameters that may be selected by the selection means are assigned description files which, according to e), may be used by the setting-up means for setting up a communication procedure that may be executed between the instances.